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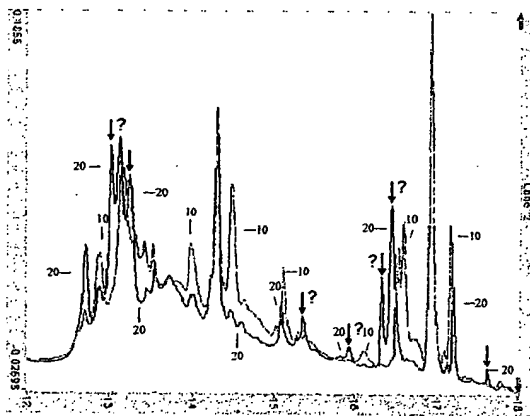
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(54) Title: SYSTEMS AND METHODS FOR CHARACTERIZATION OF MOLECULES



(57) Abstract: The present invention generally provides systems and methods for the detection, identification, or characterization of differences between properties or behavior of corresponding species in two or more mixtures comprised of molecules, including biomolecules and/or molecules able to interact with biomolecules, using techniques such as partitioning. The experimental conditions established as distinguishing between the mixtures of the molecules using the systems and methods of the invention can also be used, in some cases, for further fractionation and/or characterization of the biomolecules and/or other molecules, using techniques such as single-step or multiple-step extraction, and/or by liquid-liquid partition chromatography. The methods could also be used for discovering and identifying markers associated with specific diagnostics, and can be used for screening for such markers once discovered and identified during diagnostics screening.

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